STAGING FOR HOSTILE INCIDENTS: EVALUATING EFFECTIVENESS OF THE STAGING POLICY FOR FIREFIGHTER SAFETY

STRATEGIC MANAGEMENT OF CHANGE

By: Jonathan Smith

Clackamas County Fire District #1

Milwaukie, Oregon

An applied research project submitted to the National Fire Academy as part of the Executive Fire Officer Program

December 1999

ABSTRACT

In November 1998, an applied research project was completed by this author in response to the perceptible increase in violence and hostility that firefighters in Clackamas County, Oregon, were facing. It had been noted that many "close calls" had taken place as firefighters responded to emergency incidents. Among those incidents were examples of direct threats and assaults upon Clackamas County Fire District #1 fire personnel while performing their jobs.

As a result of the predecessor applied research project, titled *Responders* at *Risk: Surviving Violence in the Streets* a policy was developed for Clackamas County Fire District #1 in an attempt to increase the level of safety for firefighters in violent situations. Implemented in December 1998, the policy, *Staging: Known/Unknown Hostile Incidents* has now been in effect for approximately one year.

The previous applied research project focused upon the problem that hostility and violence in the field led to the compromise of firefighter safety. The problem for this applied research is that firefighter safety continues to be compromised in hostile and violent situations. The purpose for this applied research project was to follow up on its predecessor research and, specifically, to evaluate the effectiveness of the *Staging: Known/Unknown Hostile Incidents* policy for providing a reasonable margin of firefighter safety.

The evaluative research method was used in answering the following three research questions:

- What is the level of compliance with the Standard Operating
 Guideline (SOG) titled Staging: Known/Unknown Hostile Incidents?
- 2. How are other like-sized Portland metropolitan area fire agencies protecting their firefighters in similar situations?
- What, if any, modifications could be made to increase effectiveness of the SOG?

The procedures utilized herein included a thorough literature review of industry trade journals, as well as a survey of Clackamas County Fire District #1 company officers and a survey of neighboring fire agencies. Further procedures were taken from the *Change Management Model* (CMM), which can be found in the student handbook of the *Strategic Management of Change* course used at the National Fire Academy. A number of the CMM performance indicators were applied to evaluate the effectiveness of and extent of institutionalization of the *Staging: Known/Unknown Hostile Incidents* policy.

The results of this research confirmed that the problem of exposure to hostility was still very formidable for firefighters on a daily basis, and that the *Staging: Known/Unknown Hostile Incidents* policy appears to have achieved a great degree of success from the perspective of 25 Clackamas County Fire District #1 company officers surveyed. Compliance with the policy is at a high level and a majority of company officers are well versed in the policy requirements.

Three other Portland area fire departments were queried regarding any pertinent policies, procedures, and/or equipment in use for protecting firefighters who may be responding to hostile and violent incidents. It was ascertained that Clackamas County Fire District #1 is currently using the most stringent policy in the region and, most likely, has surpassed its neighbors relevant training topics as well.

Consideration was given to input from line officers with respect to suggestions for improving the effectiveness of the *Staging Policy*. Some of the proposals received were equivalent to information discovered in the literature review, as well as in the predecessor applied research project. And some of the suggestions pertaining to fire department uniforms, body armor, and training issues were used in formulating recommendations.

In the final analysis, this report offers recommendations for a periodic evaluation of the effectiveness of the *Staging Policy*, to occur again in the next 12 to 24 months. It was also recommended that the Information Management Systems Department of Clackamas County Fire District #1 seek out data tracking and reporting methods which can be used to track incidents involving hostility and violence for future non-fire risk analysis and safety improvement opportunity purposes.

TABLE OF CONTENTS

ABSTRACT	2
TABLE OF CONTENTS	5
INTRODUCTION	6
BACKGROUND AND SIGNIFICANCE	7
LITERATURE REVIEW	12
PROCEDURES	17
ASSUMPTIONS	21
LIMITATIONS	21
RESULTS	22
DISCUSSION	27
RECOMMENDATIONS	29
REFERENCES	31
APPENDIX A: Staging Policy	33
APPENDIX B: Company Officer Survey	37
APPENDIX C: Suggestions for Improvement	38
APPENDIX D: Fire Department Survey	39

INTRODUCTION

Working conditions for firefighters have undergone tremendous changes in recent years. Spanning the past two decades, the nature and volume of emergency calls has changed dramatically in many jurisdictions, often reflecting the problems and difficulties of modern day society. Clackamas County firefighters are responding to an ever-increasing number of calls resulting from domestic violence, drug abuse, and gang activity, in addition to the more "traditional" array of fires and medical emergencies (Smith, 1998).

Prior to December 1998, Clackamas County Fire District #1 followed a regional policy statement to protect its firefighters from danger when responding to hostile and violent incidents. A stricter policy was implemented on December 1, 1998; following research conducted by this author for the National Fire Academy's Executive Fire Officer course entitled Executive Development. The new policy was expressly intended to increase the margin of safety when responders unexpectedly encountered violence and/or hostility in the course of their work. In addition to the procedural changes recommended as a result of the 1998 applied research project, input was solicited from fire district staff, Safety Committee members, and the fire district's Health and Safety Officer. The end product was a formal fire district Standard Operating Guideline (SOG) entitled Staging: Known/Unknown Hostile Incidents, hereinafter referred to as the Staging Policy.

The problem is that Clackamas County Fire District #1 firefighter safety continues to be compromised in hostile and violent situations. The purpose of

this applied research project is to evaluate the effectiveness of the *Staging Policy* as it relates to firefighter safety. It is also intended that this report will fulfill the applied research requirement for the National Fire Academy course known as *Strategic Management of Change*.

The evaluative research method was used to address the following three questions:

- What is the level of compliance with the Standard Operating
 Guideline (SOG) titled Staging: Known/Unknown Hostile Incidents?
- 2. How are other like-sized Portland metropolitan area fire agencies protecting their firefighters in similar situations?
- 3. What, if any, modifications could be made to increase effectiveness of the SOG?

BACKGROUND AND SIGNIFICANCE

Firefighting is inherently dangerous work. Many safety policies and regulations are in place to increase safety margins for firefighters, and technological advances have improved fire apparatus, protective clothing, and many tools of the trade, making them safer and easier to use.

A relatively new type of occupational hazard has entered the workplace for firefighters in recent years: violence. The emergence of new laws designed to curb crimes such as stalking, road rage, car-jacking, and drive-by shootings serves as a testament to the increase in societal hostility. Unfortunately, violence

is difficult for firefighters to encounter, especially when it is unexpected and/or unprovoked.

As domestic violence becomes more prevalent in today's society, the importance of protecting firefighters from hostile situations takes on greater significance. Since Clackamas County Fire District #1 firefighters respond to a wide variety of emergency incidents, problems of safety risks related to hostility and violence from patients, relatives, onlookers, and others has notably increased in the recent past.

Recognizing the problem of Clackamas firefighters at risk due to hostile influences, the author of this report previously researched the topic, generating an applied research paper entitled *Responders at Risk: Surviving Violence in the Streets*. The paper, completed in November 1998, can be located via the National Fire Academy's fire service library in Emmitsburg, Maryland, the Learning Resource Center. The research paper culminated in a new Standard Operating Guideline (SOG): the *Staging Policy*. The *Staging Policy* was designed to improve safety for firefighters who respond to hostile and/or violent calls.

The intention of this research project is to evaluate the effectiveness of the Staging Policy for providing a reasonable degree of safety to those firefighters who may be in harms way during the performance of their duties.

Clackamas County Fire District #1 serves a population of approximately 130,000 people in a 145 square-mile area of Clackamas County, Oregon, which is situated adjacent to and south of the City of Portland. The fire district provides

fire, rescue and emergency medical services from 14 fire stations with 14 engines, 2 trucks, 2 squads, 1 water rescue boat, and other specialized apparatus such as water tenders, command vehicles, brush rigs and a rehabilitation unit. The district employs approximately 120 firefighters. During 1998, Clackamas County Fire District #1 responded to more than 11,000 calls for emergency services. (CCFD, 1999).

During the 1998 calendar year, Clackamas firefighters experienced a number of "close calls" and frightening situations on emergency calls of all kinds. Statistical information was difficult to obtain since violence and hostility is often unpredictable and may be present regardless of the call type classification. At present, Clackamas County Fire District #1 data tracking methods have yet to be developed for compiling this nature of information.

Several graphic examples from Clackamas County Fire District #1 and other fire departments were provided in the predecessor applied research project entitled *Responders at Risk: Surviving Violence in the Streets*. Each of the scenarios described details a situation wherein firefighters are exposed to violence and hostility while performing their duties. The scenarios told of firefighters being threatened, physically assaulted, and even killed in the line of duty (Smith, 1998).

Unfortunately, the trend of increasing violence has continued during calendar year 1999. The personal experience of the author, a command officer working the north battalion of Clackamas County Fire District #1 since 1996,

confirms that firefighters in this jurisdiction are continuing to be confronted with hostile situations on a daily basis.

A recent case in point occurred in March of 1999 when a Clackamas County fire engine company responded to a 9-1-1 call requesting assistance for an adult male with an altered mental status. While en route to the incident address, dispatchers told the fire personnel that the patient was a 52 year-old male who was having difficulty waking up. Dispatch invoked the staging policy due to a history of prior responses to the same address, telling responding firefighters the patient had been combative and threatening toward police officers in the past. After staging for approximately ten minutes, police notified Engine 22 that the scene was secure. On arrival at this rural one-story house, at approximately 2 p.m., Engine 22 firefighter-paramedic Burke Slater and his crewmates found the male patient in bed. The patient's wife told firefighters that he suffered from post-traumatic stress syndrome and the patient said he had taken several medications to help him sleep. The patient appeared quiet and somewhat confused, at one point commenting inappropriately "I knew it would come to this." After the patient agreed to be transported to the hospital, he got out of bed and put his clothes on. He stated his slippers were "in the other room" and he was escorted by two firefighters to get them. According to Slater's report:

Patient picked up socks and slippers, sat on a futon and put on (his) socks and slippers. Patient then stood up and took two steps forward towards (the) piano. Asked patient if he was okay because he was quiet and appeared confused... Patient states "I'm okay,"

and looks towards the pictures on the piano. As patient moves towards the piano... asked patient what he was doing. Patient replied "I'm getting my gun." Patient picked up a handgun ...Firefighter Slater wrestled the gun from patient... Patient fell over ottoman... (personnel) quickly fled the house.

The patient then barricaded himself inside the house, and police assembled a special tactical team to surround the residence, eventually resolving the situation. After police had the patient in custody, Engine 22 was called back to decontaminate the handcuffed patient, who had "covered himself in lighter fluid" (B. Slater, personal communication, October 2, 1999).

Another relevant incident occurred on July 6, 1999, when a Clackamas County Fire District #1 engine company responded to a reported burn injury at a residence in suburban Clackamas. On arrival, Engine 27 paramedics found a 28 year-old female seated on her bed with second degree burns to one leg. She stated that while she was sleeping her three year-old son was using a cigarette lighter to ignite a bag of fireworks. Apparently she was burned when some bedding caught fire. Firefighter-paramedics quickly took note of the scene, which included not only legal fireworks, but illegal explosives and homemade "pipe bombs" as well. The residence was evacuated, police were called, and the bomb squad responded to defuse and remove the explosives. Twelve deadly pipe bombs were recovered, among an assortment of other illegal flammable devices (D. Lais, personal communication, October 16, 1999).

The research and recommendations contained herein parallels and reinforces many of the concepts conveyed in the National Fire Academy Course entitled *Strategic Management of Change*. In particular, this applied research project is prompted by the tumultuous change facing fire service personnel as they respond to known and unknown hostile situations; danger is ever present during the course of their work in the community. Moreover, in evaluating the effectiveness of the *Staging Policy*, the procedures utilized for processing the data are taken directly from Phase IV of the *Change Management Model* found in the *Strategic Management of Change* text.

LITERATURE REVIEW

A variety of sources were consulted during the course of the literature review. Included among them was a review of industry standards, trade journals, and recent incident report narratives pertinent to the topic. In addition, two surveys were developed and distributed to aid in assessing the effectiveness of the *Staging Policy* as implemented on December 1, 1998. The first survey was distributed to Clackamas County Fire District #1 company officers to elicit their opinions regarding the policy and its overall effectiveness at increasing firefighter safety. The second survey was mailed to three surrounding fire service agencies serving a demographically similar population in the Portland metropolitan area. Its purpose was to determine what measures adjacent fire departments have taken to protect firefighters from violent and hostile situations.

NFPA STANDARDS

As noted previously, the fire service in general has an abundance of regulations designed to make an inherently dangerous occupation safer. These rules include State and Federal laws, consensus standards, and local policies. Generally, these regulations address the job of fighting fires and oftentimes speak about handling hazardous materials and other fire service related duties. Unfortunately, beyond the "generic" type of staging policy, which can be sometimes found in EMS protocols, there is very little guidance via industry standards available for firefighters regarding hostile incidents.

National Fire Protection Association (NFPA) Standard #1500, 1997

Edition is a comprehensive and widely used consensus standard, which provides guidance regarding firefighter occupational health and safety. NFPA 1500 specifies general policy direction such as the following:

- 2-3.1 It shall be the responsibility of the fire department to provide a safe, healthy work environment for its members. The fire department shall research, develop, implement, and enforce an occupational safety and health program that recognizes and reduces the inherent risks involved in the operations of a fire department.
- 3-1.1 The fire department shall establish and maintain a training and education program with a goal of preventing occupational accidents, deaths, injuries, and illnesses.
- 3-5.1 Specialized training and education shall be provided to

members regarding special hazards to which they may be exposed during fires and other emergencies.

In addition to the more generalized safety guidance, NFPA 1500 also provides some direction that is more specifically geared towards the nature of this research. (The reader should be aware that section A-5-1.2 of NFPA 1500 was inadvertently neglected in this author's previous applied research project). Section A-5-1.2, for instance, states: "The fire department should provide body armor for all members who operate in areas where a potential for violence or civil unrest exists."

FIRE SERVICE ACCREDITATION

The Commission on Fire Accreditation International (CFAI) has developed a model program for continuously improving the quality of fire services. The process begins with an organizational self-assessment, in which an internal audit is performed, measuring an agency's performance against over 200 established industry performance indicators. When the self-assessment process has been successfully completed, an agency may voluntarily apply for accreditation, which may be achieved following a peer team site visit, a grading process, and review by the commission. Important aspects of self-assessment and accreditation are that it promotes continuous improvement, planning, goal setting, performance measures, and quality services (Bruegman & Coleman, 1997).

There are ten broad categories included in the CFAI Self-Assessment handbook; within each category is a listing of benchmarks, known as

performance indicators, used for measuring performance against determined weighable criteria. The self-assessment categories are: Governance and Administration, Assessment and Planning, Goals and Objectives, Financial Resources, Programs, Physical Resources, Human Resources, Training and Competency, Essential Resources, and External Systems Relations.

In particular, CFAI (1999) Categories (5G) Programs, and (6E) Safety, are directly pertinent to the topic of responding to violent incidents. Criterion 5G, Emergency Medical Services, requires that adequate apparatus, staffing and equipment is provided to meet the emergency deployment mission. And that standard operating procedures, standing orders and protocols be in place to meet the stated level of response. Also, all relevant state and federal standards must be followed in order to comply with the CFAI model.

Criterion 6E, Safety Equipment, also refers to following all applicable state and federal regulations. Further, it requires an agency to provide appropriate safety equipment, policies and procedures, and training germane to its emergency response activities.

TRADE JOURNALS

The ample availability of trade journal writings on this topic suggests that responding to hostile incidents is a widespread concern for the fire service. For instance, Robertson (1997) states that firefighters are finding themselves exposed to hostility and violence in the field with increasing frequency.

Citing statistical information reported from a 1994 study done by Donald W. Walsh, PhD, EMT-P, Spivak (1998) reports that 92% of paramedics said they

had been assaulted in some manner while on duty. Of those, 64% reported injuries resulting from an assault. Spivak also reveals from the Walsh study that, based upon surveys of more than 250 paramedics in 25 major U.S. cities, 80% of the organizations responding said they had had paramedics under attack by gunfire, without being wounded, and 24% reported personnel shot in the performance of their duties.

Statistics reported in another study revealed that in 1996 over 5 per cent of firefighter deaths in the United States were caused by gun shots (Louderback, 1998). Some cities now consider violence against emergency medical service (EMS) providers a reality of day-to-day business; with attacks on emergency responders increasing at an alarming rate (Robertson, 1997).

Beck (1996) warns that firefighters might be lulled into complacency, because even a routine-appearing call can become suddenly violent. Benson (1995) echoed Beck's sentiment, saying that a scene that may appear safe at first can rapidly deteriorate, putting emergency responders in grave danger. Benson (1995), Jacobsen (1997), and Robertson (1997) all agree that excellent scene assessment skills are necessary. For these skills are a great asset when making important decisions while en route, approaching or arriving at an emergency scene.

Many experts emphasized the need for training personnel to increase awareness and the ability to remain safe in compromising situations. Jacobsen (1997) promotes training in martial arts and the use of body armor, while Wilder (1995) mentions that self-defense skills, to include defensive postures and

maneuvers and protective holds, are every bit as important as fundamental EMS skills. Wilder also asserts that emergency personnel should learn how to "read" people and recognize signs of imminent violent conduct.

FIRE DEPARTMENT SURVEYS

As noted previously, two survey instruments specifically pertaining to this applied research topic were used. Since the evaluation of the *Staging Policy* is a matter pertaining to Clackamas County Fire District #1, the surveys proved most invaluable in determining the effectiveness of the policy. More detail can be found regarding the surveys in the Procedures and Results sections, and in Appendices B, C and D of this report.

PROCEDURES

The literature review performed as a component of this applied research project confirmed the existence of the problem facing firefighters responding to hostile incidents, not only in Clackamas County, Oregon, but nationwide.

In reviewing Clackamas County Fire District #1incident reports and personal communications from 1999, the author found ample evidence that fire crews are continuing to be faced with similar dangers from hostility and violence as was documented in the predecessor applied research project during 1998. Two representative incidents are described in the Background and Significance chapter of this document.

The primary objective of this research was to evaluate the effectiveness of the *Staging Policy* that resulted from the predecessor research project in 1998.

The procedures used for this applied research project were taken from the Change Management Model as described in the Strategic Management of Change (SMOC) course student manual.

The first survey, entitled *Company Officer Survey Regarding SOG 207.4* – *Staging: Known/Unknown Hostile Incidents* was primarily developed to ascertain the opinion of Clackamas County Fire District #1 personnel regarding their opinion of the effectiveness of the *Staging Policy* in providing for firefighter safety. This survey instrument was also designed to gauge the organizational institutionalization of the policy by applying the information gathered from responses to the change management model.

The survey was given to all 37 company officers at Clackamas County

Fire District #1, and 25 completed responses were received. Company officers
are first line supervisors at the rank of either Captain or Lieutenant. These are
the people who are in charge of a response unit, usually an engine or ladder
truck company that responds to 9-1-1 calls for fire, medical and other types of
emergencies. Company officers are in the position of making important
decisions on all responses, with the safety and integrity of the crew being of vital
importance. On responses that may involve hostility, they must decide whether
or not staging is appropriate, and, if so, they must direct other responding units to
a staging location.

Personnel from Clackamas County Fire District #1 Station 1 ('A' shift)
assisted in drafting the questions. The survey queried respondents on the
following topics: (a) familiarity with the *Staging Policy*; (b) approximate number of

hostile incidents responded to in past 12 months; (c) estimated percentage of known versus unknown hostile incidents; (d) effectiveness rating of *Staging Policy* for providing firefighter safety when responding to known hostile situations; (e) effectiveness rating of *Staging Policy* for providing firefighter safety when responding to unknown hostile situations; (f) additions/suggestions for making the policy more effective.

The second survey instrument used during this research project was sent to neighboring fire departments to determine what steps they have taken toward implementing staging or other safety policies and procedures pertinent to this topic. In keeping with the research question addressing how other fire departments in the Portland metropolitan area are dealing with the violence problem, the survey queried respondents from Portland Fire Bureau, Gresham Fire & Emergency Services, and Tualatin Valley Fire & Rescue about policies, procedures and equipment for protecting firefighters in hostile situations. Two of the three departments replied, with similar responses.

The fire department survey contained questions to generally assess the following: (a) does your fire department use a staging policy; (b) describe any additional policy(ies) in use pertaining to hostile incidents; (c) describe any special procedures, training, or equipment used pertaining to hostile and violent responses.

The first benchmark described in Phase IV of the Change Management

Model is to evaluate the implementation against the initial change goals. In this

case, a weakness was identified at the onset of the implementation of the

Staging Policy. While the intent of the policy is clearly denoted as that of providing for firefighter safety in known and/or unknown hostile situations, there is no existing quantifiable measure in relation to its implementation.

Similarly, the second indicator is to evaluate the implementation against the described future state. In the implementation of the Staging Policy, no further definition is given in this regard beyond that of increasing personnel awareness and safety. Although a "future state" description may be lacking, responses from surveyed employees indicate an elevated awareness, both of the policy itself, and of the issue of violence in general. Again, aside from the survey responses, there is no quantifiable before-and-after measurement available.

An important consideration is determining how well *institutionalized* the change has become. With approximately one year of use, the *Staging Policy* is still relatively new. However, with 32% of responding that they were "very familiar" with the policy, and 60% stating they were "somewhat familiar", it would seem to denote that the implementation has been largely successful.

As for the *speed of implementation* and absorption of the policy into the workforce, which is another indicator in the *Change Management Model*, it occurred very rapidly. The policy introduction process used at Clackamas County Fire District #1 allows input from staff as well as the rank-and-file members, prior to the final drafting and adoption of a policy. The *Staging Policy* was no exception, and the process affirmed both "buy-in" through widespread participation in policy development, and familiarity from reading through and providing feedback on new policies.

Perhaps the only *unanticipated action resulting from the implementation* of the new *Staging Policy* was the request by some firefighters for protective gear to be used in violent situations. While the feasibility of body armor has yet to be determined, labor and management have both acknowledged that this would be a complex addition to currently issued personal protective equipment, and one that would require further research, training, and policy development prior to a determination.

Resistance to the procedural changes brought about with the implementation of the *Staging Policy* has been minimal. The only possible exceptions being that some Company Officers were responding to known hostile scenes using lights and siren to reach the staging area, instead of following the letter of the policy, which states that lights and siren are not to be used.

Assumptions

In completing this applied research project, certain basic assumptions were used. It was first assumed that the authors cited in trade journals and industry publications were learned in regards to the subject matter and based their writings upon valid research methodologies.

An assumption was also made that company officers surveyed did not have prior knowledge of the survey questions, nor did they confer during completion of the survey. Further, it was assumed that all surveys, from personnel as well as from neighboring fire departments, were answered honestly and without prejudice.

Limitations

The most significant limitation to this applied research is the unavailability of topic-related statistical data from most fire departments. Had this data been forthcoming, analysis of the number of hostile exposures to personnel and effectiveness of safety policies and procedures would be far more revealing.

Pertaining to both of the surveys used to gather information for this research, the first had a 67.5% return rate, with 25 out of 37 completed and returned. The second survey, sent to neighboring Portland area fire departments, had a 66.6% return rate, with 2 out of three responding.

In addition, though less encumbering, this applied research was limited to a six-month due date by the *Executive Fire Officer Applied Research Guidelines* published by the National Fire Academy.

RESULTS

1. What is the level of compliance with the Standard Operating
Guideline (SOG) entitled Staging: Known/Unknown Hostile
Incidents?

According to information ascertained by those company officers responding to the survey, 92% replied that they were either somewhat familiar or very familiar with the *Staging Policy*, with 0% considering themselves to be unfamiliar with the policy. The aggregate responding that they were very familiar was 32%; with another 60% answering that they were somewhat familiar with the *Staging Policy*.

Although it is recognized that familiarity with the policy in and of itself is not absolute evidence of compliance, it is concluded that a majority of respondents recognize the risks associated with responding to hostile incidents and are complying with the intent of the policy whenever possible. Company officers hold a great deal of discretionary judgment with respect to how, when, and to what extent the *Staging Policy* is used. In recognition of the dynamic nature of emergency response, as well as the competency and training of company officers, Clackamas County Fire District #1 uses standard operating quidelines as opposed to an inflexible rule or regulation.

Further validation of compliance has been found, from the author's perspective (as a shift battalion chief who closely monitors response activity of companies in his district), through observation of actual incidents in the field. Company officers are generally inquisitive toward dispatch to try to ascertain if there may be any indications of hostility prior to arrival, as well as being perceptive in surveying incident scenes for possible threats.

2. How are other like-sized Portland metropolitan area fire departments protecting their firefighters in similar situations?

Three fire departments with contiguous borders to Clackamas County Fire
District #1 were surveyed in regards to this research question. Portland Fire
Bureau, Gresham Fire and Emergency Services, and Tualatin Valley Fire &
Rescue were each mailed a two-page questionnaire with seven questions posed.
The surveys were sent in care of the fire department Safety Officer, with an

enclosed addressed postage-paid envelope. A response of 66.6% was received, with Portland and Gresham returning completed surveys, and no response from Tualatin Valley Fire & Rescue.

It should be noted that while both Portland Fire Bureau and Tualatin Valley
Fire and Rescue serve significantly larger populations that Clackamas County
Fire District #1, they were considered to be "like-sized" in respect to being
considered in the top six largest fire departments in Oregon. Gresham, while
somewhat smaller than Clackamas County Fire District #1, also rates as one of
the six largest fire departments in the state. In addition to having contiguous
borders, the aforementioned agencies all serve the greater Portland area.

Portland and Gresham both replied that they are utilizing the Multnomah County Emergency Medical Services (EMS) Protocol entitled *Staging for High Risk Response* when responding to hostile or potentially violent situations. This is the same policy that was used by Clackamas County Fire District #1 prior to implementation of the more stringent *Staging Policy* developed as a result of the predecessor applied research project.

Both of the fire departments responding stated that they did not use any other policies or procedures for hostile incidents, nor did they issue body armor or any other special equipment. They also answered that they had not offered any training for personnel in self-defense or other topics pertaining to dealing with societal violence.

3. What, if any, modifications could be made to increase the effectiveness of the SOG?

In addressing this question, the author draws primarily upon the opinions and suggestions of those Captains and Lieutenants responding to surveys.

The survey instruments provide the information most pertinent to the purpose and scope of this applied research project.

Questions #4 and #5 were aimed directly at soliciting an opinion regarding the overall effectiveness of the *Staging Policy* in accomplishing its goal – to improve firefighter safety. Responses to both questions were largely in the affirmative, with 32% answering that the policy is very effective and 48% replying that it is somewhat effective on known hostile emergency responses.

The question pertaining to unknown hostile incidents received a lower rating, with 52% replying that the policy was either very effective or somewhat effective. The lower rating on this type of response is understandable from the standpoint that unknown hostility and violence is the most difficult to be prepared for ahead of time. Further preparations for this type of response are likely beyond the scope of a policy or standard operating procedure.

Interestingly, many of the ideas offered by these company officers paralleled recommendations and concepts found in the review of trade journals.

Of the 25 company officer surveys received, 17 respondents, or 68%, offered comments and/or suggestions, in varying degrees of articulation. As depicted on Appendix C, the bulk of the suggestions are related to five topic areas: training, communications, equipment, uniforms/appearance, and police-fire relations.

Many of the responses reflect concepts covered in the Staging Policy or in

related training that Clackamas County Fire District #1 fire personnel received during 1999. Though not all suggestions are useful or applicable to the *Staging Policy*, many suggestions were insightful and well articulated. It is very possible that some, if not all, of these topics will be covered during annual training courses.

The two predominant suggestions pertain to uniform appearance and body armor. Many firefighters feel they are "targets" for hostility owing to the fact that their work uniforms have a similar appearance to that of their law enforcement counterparts, i.e. button-up shirts with badges, shoulder patches, etc. Of those survey respondents offering suggestions, 35.2% mentioned uniforms/appearance as an important issue.

Regarding protective equipment, some firefighters feel that they should be supplied with this body armor, which is currently not done at Clackamas Co. Fire District #1. Of the suggestions received from survey respondents, 17.6% felt that body armor should be issued.

In answering this research question, the author completed several tasks.

First, the responses to the company officer survey were tallied and evaluated.

Then, the suggestions received on the company officer survey were compiled into a matrix for comparison purposes, after which the information was evaluated for practical application..

Next, the survey of neighboring fire agencies was thoroughly evaluated, with an eye toward borrowing any useful concepts currently in use which could be applied to the *Staging Policy*.

After completing the aforementioned series of tasks, the author concludes that, as a practical matter, the current *Staging Policy* is likely the most stringent policy in use in the Portland Metropolitan area today. In reviewing the suggestions offered in the first survey, many, if not all points have already been addressed in some fashion. The predecessor applied research project included many of these ideas, such as body armor and modification of fire department uniforms, as a means of improving firefighter safety. It must be noted, however, that further research, training, and policy development will be necessary in order to move ahead with these issues.

DISCUSSION

It should be mentioned here that there is a significant difference in the degree of risk involved when responding to calls with "known" hostile indicators, as opposed to those calls which are "unknown." For it is the unknown violent episode that is the greatest danger, wherein responders are surprised and, likely unprepared. In looking at neighboring departments, as well as during the literature review, nowhere was a policy to be found to address the "unknown" aspects of responding to hostile incidents, except in the *Staging Policy* which is evaluated in this report. The Clackamas *Staging Policy* is clearly the most comprehensive of the departments surveyed.

During the course of this applied research project, it occurred to the author that evaluating the effectiveness of a safety policy such as the Staging Policy is a difficult, and somewhat esoteric task. Even proving the existence of the

problem - that firefighters face hostile situations on a regular basis – is made onerous due to a lack of statistical data. It is mainly through the numerous trade journal articles and contact with firefighters day in and day out that the significance of the problem truly becomes tangible.

Survey responses show that 32% of company officers estimate they have Responded to 5 or less hostile incidents in the past 12 months, 36% have responded to between 5 and 10 such incidents, with 16% responding to between 10 and 20, and 16% responding to 20 or more.

Out of necessity, a heavy reliance was placed upon the company officer survey, for it is the most pertinent measure available. And, since company officers use the policy in the field, it is they who can best judge first hand its effectiveness.

With only one year of history, the staging policy appeared with certainty to be achieving the desired effect. It has increased awareness among line firefighters to the problem of violence and hostility and has elevated safety concerns. Also, there have been none more than minor injuries recorded this year from hostile situations.

As for the implications upon Clackamas County Fire District #1, it is expected that the policy will continue to be monitored for effectiveness, as well as an agency-wide focus toward planning for the future. Questions related to future growth, demographic and cultural changes, and funding challenges will continue to have a great bearing upon service delivery methods and how safety issues are ultimately addressed.

RECOMMENDATIONS

Since violence and hostility are not likely to vanish from the workplace for firefighters, preparation will continue to be critical in maintain a reasonable degree of safety. It is recommended that Clackamas County Fire District #1 continue its training pertaining for firefighter safety in hostile situations, offering the following topics by experts in various fields at least annually.

Incident Command System Awareness

Gang Mentality/Cultural Factors Survival Training

Protective Equipment/Body Armor Self-Defense & Legal Aspects

Inter-Agency Cooperation Restraints & Protective holds

Weapons Defusing Hostile Situations

Planning for Violence Interpersonal Dynamics

It is also recommended that further evaluation be conducted to assess the effectiveness of the *Staging Policy* after it has been in effect for another 12 to 24 months. As Clackamas County Fire District #1 is currently involved in joint training efforts with law enforcement agencies, it would also be beneficial to cross-train fire personnel in order to come to common understandings of terms such as a "secure" incident scene.

For purposes of risk analysis and safety improvements, it is recommended that the Information Systems Department of Clackamas County Fire District #1 seek out data tracking mechanisms for statistical reporting of hostile and violent situations. This would provide future researchers the opportunity to quantify and

further analyze the problem, as well as aiding in determining effectiveness of policies, procedures and equipment.

In response to previously held recommendations by other authors, as well as concerns echoed by Clackamas County Fire District #1 company officers, this author also recommends that further research be conducted on the following topics:

The Impact of Uniform Appearance on Firefighter Safety

Feasibility and Effectiveness of Body Armor for Firefighters

REFERENCES

- Beck, D.R. (1996, June). Protecting firefighters from violence. *Fire Engineering*, 22+.
- Benson, K. (1995, March). How to ensure personal safety. *Emergency*, 42-45.
- Bruegman, R.R. & Coleman, R.J. (1997) Self-Assessment: Safeguarding the future. *Fire Engineering*. *150* (3), 83-94.
- Clackamas County Fire District #1. (1999) *Five-year strategic plan:* 1999-2004.

 Milwaukie, OR: Author.
- Commission on Fire Accreditation International. (1999). *Fire and emergency*service self-assessment manual (pp. 5.13 5.27). Fairfax, VA:

 International Association of Fire Chiefs.
- Federal Emergency Management Agency, Unites States Fire Administration,

 National Fire Academy. (1996). Strategic Management of Change

 student manual.
- Jacobsen, B.J. (1997, November). Staying safe in potentially violent situations. *Emergency*, 12-17.
- Louderback, J. (1998, March). Attacks of firefighters. Fire International, 15-17.
- National Fire Protection Association. (1997). NFPA 1500: Standard on Fire

 Department Occupational Safety and Health Program. (1997 ed.).

 Quincy, MA: Author.
- Robertson, H. (1997, March) Emergency responders caught in the crossfire. *Firehouse*, 16+.

- Smith, J. (1998, November). Responders at Risk: Surviving Violence in the Streets. (Executive Fire Officer Research Paper). Emmitsburg, MD: National Fire Academy.
- Spivak, M. (1998, May). Hurting those who save: Violence against EMS providers. *Emergency Medical Services*, 26-28+.
- Wilder, S. (1995, August). EMT self-defense and the aggressive patient. FDSOA Health & Safety, 6, 3-7+.

APPENDIX A

207.4 STAGING: KNOWN/UNKNOWN HOSTILE INCIDENTS

EFFECTIVE: DECEMBER 1, 1999



When responding to evident or possible hostile scenes, the following procedures are to be used. Because every incident is different, some individual judgement must be used, keeping firefighter safety top priority at all times. The purpose of this standard operating guideline is to provide for increased safety to those personnel responding to incidents which are hostile in nature, or those incidents which become hostile or violent, either after arrival or prior to arrival.

KNOWN HOSTILE SCENE

When responding to an incident in which dispatch directs units to stage:

- 1. Apparatus will respond Code One. (No lights or siren). "Advise the responding ambulance(s) that they can respond code one also. At the officers' discretion, because of a long response distance, this may be stepped up to code three and reduced to code one on approach.
- Apparatus will stage at least three blocks away from, and out of sight of, the incident in order to avoid being seen by bystanders or involved parties.
 This may be farther in rural areas.
- Inform dispatch and the responding ambulance of your location and actions.
- 4. Turn off vehicle lights or use only four-way flashers in staging, if possible.

5. Do not enter scene until it is declared secure by law enforcement.

Further information related to EMS response can be found in the Patient Treatment Protocol "Staging for High Risk Response".

If you are responding to an incident in which no order is given to stage, but the nature of the call indicates firefighter safety may be compromised, notify dispatch to send law enforcement in order to secure the scene, and follow the procedures indicated above. Request an ETA from law enforcement.

NOTE: Do not assume the incident scene to be secure merely because police are present.

All personnel should be aware that the term "scene is secure" may have a different meaning when this information is coming from a police agency. Oregon law only allows police officers to search and secure the immediate area of a crime scene. For example, if a domestic disturbance occurs in the living room of a home and the police find both involved parties in the living room, they are not allowed to investigate any further into the home without "probable cause". This may lead to only the living room being secure, while the rest of the house is unchecked.

Fire officers should always "Face-To Face" with the police officer in charge to determine just exactly what areas of a scene are secure. It is lawful for police to escort fire personnel in completing their investigation when requested. This should always be done. Do not venture into an area that you are not positive that it has been secured by police.

UNKNOWN HOSTILE SCENE

DISPATCH - Listen carefully to dispatch information pertaining to the nature of and/or circumstances of the emergency incident. Question dispatchers for further details or clarification if needed. Stage apparatus if appropriate, awaiting further information or law enforcement response. Consider staging at the fire station or other fixed facility, depending on situation, estimated police response time, and/or location of incident.

RESPONSE - Use knowledge of address, vicinity, dispatch information, observations while en route, or any other pertinent data to assess the incident prior to arrival. Immediately implement the staging procedure and call for law enforcement if safety issues are apparent.

ARRIVAL- Upon arrival, and throughout the incident, assesses the scene for potential hostility or violence. Consider implementing the Incident Command System. Call for additional resources as needed. Establish direct contact with law enforcement. Assume any threatening statements or behavior to be dangerous and act accordingly.

IF THREATENED- Whenever possible, all personnel retreat to vehicle and leave the scene promptly; notify dispatch of situation. If potential physical harm is imminent, defend yourself in any way possible, attempting to use only enough force to eliminate the threat to yourself and other people.

STAGING PROTOCOL

PROCEDURE

Fire units shall stage under the following conditions:

- 1. Any time so directed by dispatch, police, or supervisory personnel.
- 2. Any time an incident involves violence which might be dangerous to personnel.
- 3. Any incident, at the discretion of the company officer, NOTE: <u>If any unit</u> decides to stage, all other units shall stage.
- 4. Hazardous materials incidents, as appropriate.
- 5. After arrival at scene, if scenario reveals potential violence, hazardous materials, or other threats, retreat to a safe staging area if possible.

APPENDIX B

COMPANY OFFICER SURVEY

REGARDING SOG 207.4

STAGING.	KNOWN/I	INKNOWN	LITZOH I	E INCIDENTS
JIAGING.				

1.	How familiar are you with Sta	ndard Operating	g Guideline 20	07.4, Staging:
	Known/Unknown Hostile Incid	lents?		
	a. very familiar b. somewh	nat familiar c.	slightly famili	ar d. unfamiliar
2.	Approximately how many hos	tile incidents ha	ave you respo	nded to in the
	past 12 months?			
	a. < 5 b. 5 – 10	c. 10 – 20	d. > 20	
3.	Of those hostile incidents, app	oroximately wha	at percentage	would you
	estimate were "known" or sus	pected versus '	'unknown" to	be hostile prior
	to arrival?			
	% know	'n	%	unknown
4.	How would you rate the effect	iveness of SOC	3 207.4 in pro	viding for
	firefighter safety when respon	ding to known I	hostile situatio	ons?
	a. very effective b. somew	hat effective	c. fair	d. not effective
5.	How would you rate the effect	iveness of SOC	G 207.4 in pro	viding for
	firefighter safety when respon	ding to unknow	n hostile situa	ations?
	a. very effective b. somew	hat effective	c. fair	d. not effective
6.	What changes or additions we	ould you sugge	st to make thi	s policy more
	effective in providing firefighte	er safety when r	esponding to	hostile
	incidents?			

APPENDIX C
Suggestions for Improving Effectiveness of Staging Policy

Suggested Improvement	No. of Responses
Eliminate badges/wear distinctive FD clothing	6
Provide body armor	3
Monitor scene continuously/never assume scene is safe	2
Provide clear definition of acceptable self-defense methods	2
Offer scene safety training from experienced police/FD instru	ctors 2
Improve police-fire communications/use common radio freque	encies 2
Improve working relationship with law enforcement	2
Dispatch additional units on hostile incidents	1
Send both police and fire on "welfare checks"	1
Improve dispatch communications/procedures with FD	1
Use 2 back-up people when backing apparatus	1
Wear fire axe-belt	1
Practice together	1
Consider using "fanny packs" – not medical kits – to keep har	nds free 1
Solicit additional information from dispatch	1
Use risk-versus-benefit decision making regarding staging	1

APPENDIX D

RESPONDING TO HOSTILE & VIOLENT SITUATIONS SAFETY SURVEY

Please answer the following questions about your fire department.

1.	Does your department follow a staging policy for responses to hostile or
	violent incidents? Yes or No?
	If yes, what is the title of the policy?
2.	Does your department utilize any additional policies and/or procedures
	applicable to hostile and violent situations? Yes or No?
	If yes, please give policy title and brief description (or attach copy of
	policy).
3.	Has your agency provided training for personnel in self-defense or other
	topics pertinent to dealing with societal violence?
	Yes or No?
	If yes, please give course title(s) and description of content.
4.	Does your department issue firearms, pepper-spray, or any other tools to
	be used for self-protection? Yes or No?
	If yes, please explain.
5.	Does your department permit personnel to carry (personally owned)
	firearms, pepper-spray or any other devices to be used for self-protection?
	Yes or No? If yes, please describe.

6.	Does your department issue body armor or any other protective gear for
	use in violent situations? Yes or No? If yes, please describe.
7.	Does your department permit personnel to use (personally owned) body
	armor or other protective gear for use in violent situations?
	Yes or No? If yes, please describe.
	Department:
	Contact Person:
	Telephone:
	E-mail Address: